Deane,— Pink-flowered Lupinus perennis 1912]

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Tetraedron minimum, Hansgirg. Plankton, Lake Opinacon. Tetraedron regulare, Kuetzing. Plankton, Lake Opinacon. Scenedesmus bijuga, Wittrock. Plankton, Lake Opinacon. Scenedesmus quadricauda, Brébisson. In plankton, Lake Opinacon. Coelastrum microporum, Naegeli. Among plankton, Lake Opinacon. Hydrodictyon reticulatum, Lagerheim. Common in a pool below the falls at Kingston Mills, July 15th.

Pediastrum boryanum, Meneghini. Common in plankton, Lake Opinacon.

*Pediastrum duplex, Meyer. Plankton, Lake Opinacon. Pediastrum tetras, Ralfs. Plankton, Lake Opinacon. Gloiococcus mucosus, A. Braun. Scarce in plankton, Lake Opinacon. *Coleochaete soluta, Pringsheim. Common on Potamogeton amplifolius in Lake Opinacon.

*Coleochaete orbicularis, Pringsheim. On drifting water-plants at Jones Falls. Common on Potamogeton amplifolius in Lake Opinacon. Cladophora fracta, Kuetzing. Floating in great masses at the mouth of the Cataraqui River.

BOTANICAL DEPARTMENT, QUEEN'S UNIVERSITY, Kingston, Ontario.

THE PINK-FLOWERED FORM OF LUPINUS PERENNIS. - It has been known for a long time that our common Lupine, Lupinus perennis L., occasionally varies from the typical blue or purplish-blue to pink or white, and our manuals contain frequent references to this fact. In the Bulletin of the Torrey Botanical Club for 1890, volume XVII, page 124, Dr. N. L. Britton made the following note, "Lupinus perennis L., forma rosea. Flowers beautifully pink. May's Landing, Atlantic Co., [New Jersey] Dr. J. E. Peters." As long ago as 1814, Pursh in his Flora Americae Septentrionalis, vol. II, page 467, says, "Flowers blue, purple, and sometimes white." Emma J. Cole in the Grand Rapids Flora [Michigan], 1901, page 96, says, "Flowers are blue, white, purple or pink; forms with pink flowers are found along Hogadone Creek (W. M. Clark)." In the Michigan Flora by W. J. - Beale and C. F. Wheeler, 1892, page 83, we read, "Flowers, a fine blue-purple, varying to light pink." And to cite one more reference, in Plants of Monroe County, New York, and adjacent Territory by

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Florence Beckwith and Mary E. Macauly, 1896, page 56, is the following statement in regard to this Lupine, "A form with pink flowers occurs near the 'sand cut' in Penfield." These references to variations from the normal color are a few taken from a number of similar records and they show that departures from the typical color are not very infrequent, and yet are of sufficient interest to be cited at times as to locality. My excuse for offering one more example is the fact that I had some freshly gathered plants put into my hands, and this enabled me to examine in some detail the color of the flowers. On May 30, 1911, Mr. John Murdock brought me a large bunch of pink Lupine collected that same morning in Namequoit, Massachusetts, where he has a summer home. I am indebted to Mr. Murdock for an account of the stations where the plant occurs. The typical blue form was very abundant near his home over the sandy areas that prevail on Cape Cod. Scattered among these on opposite sides of Potanumicut River were the pink forms. The original station, the one from which came the specimens brought to me, covered an area of about one acre, the plants growing in scattered patches from one to four feet across. This station was in good condition on May 30, 1912. The second station was half a mile below the first and contained a number of plants scattered among the normal ones. The third station was half a mile further down on Old Field Point near the mouth of the river. Mr. Murdock has made special inquiries and he finds no evidence that this pink form was introduced, while its occasional occurrence throughout eastern United States, the general range of the species, would lead one to look for it wherever the type grows. Mr. John Kenrick who lives near the area covered by the Lupine has told Mr. Murdock that the pink form has been there for years.

As to the color of the flowers, the keel was a soft, light pink which continued in the adjoining portions of the lateral petals, but turned gradually to a deeper hue in their upper parts. The banner took up this color which grew deeper and deeper till it reached the upper central part where it culminated in a strong dark pink spot. This gradation, in the same hue throughout the flower, from the very light to the very dark pink gave an indescribable delicacy of tone which, unfortunately, cannot be preserved in the pressed specimen. It must be seen to be appreciated.— WALTER DEANE, Cambridge, Massachusetts.